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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/712,491
Filing Date	11/13/2003
First Named Inventor	Robin Brigman
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	WSR-54 (SRS 02-019)

Sheet	1	of	1
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U. S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Date
Considered

8-4-07

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PTO/SB/088 (08-03)
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		Application Number	10/712,491		
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		First Named Inventor	Robin Brigmon		
		Art Unit	1754		
		Examiner Name	Unknown		
Sheet	1	of	3	Attorney Docket Number	WSR-54 (SRS 02-019)

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JKW		HEITCAMP & CERNIGLIA, "Effects of Chemical Structure and Exposure on the Microbial Degradation of Polycyclic Aromatic Hydrocarbons in Freshwater & Estuarine Ecosystems", Env. Toxicology & Chem. Vol. 6, pp 535-546, 1987.	
		DABROCK et al, "Identification & Characterization of a Transmissible Linear Plasmid From Rhodococcus erythropolis BD2 That Encodes Isopropylbenzene & Trichlorethene Catabolism", Applied & Env. Microbiology, Vol. 60, No. 3, Mar, 1994, pp 853-860.	
		ROSSELO-MORA et al, "Comparative Biochemical and Genetic Analysis of Naphthalene Degradation among Pseudomonas stutzeri Strains", Applied & Env. Microbiology, Vol. 60, No. 3, Mar, 1994, pp 966-972.	
		JUHASZ et al, "Microbial degradation and detoxification of high molecular weight polycyclic aromatic hydrocarbons by Stenotrophomonas maltophilia strain VUN 10,003", Letters in App. Microbiology 2000, Vol. 30, pp 398-401.	
		STORY et al, "Identification of four structural genes and two putative promoters necessary for utilization of naphthalene, phenanthrene, and fluoranthene by Sphingomonas paucimobilis var. EPA505", Gene, Vol. 260, 2000, pp 155-169.	
		HAMMER et al, "Isolation and Characterization of a Dibenzofuran-Degrading Yeast: Identification of Oxidation and Ring Cleavage Products", App. & Env Microbiology, Vol. 64, No. 6, June 1998, pp 2215-2219.	
		GORDEN et al, "Rapid screening for bacteria capable of degrading toxic organic compounds", J of Microbiological Methods Vol. 18, 1993, pp 339-347.	
		BEZALEL et al, "Initial Oxidation Products in the Metabolism of Pyrene, Anthracene, Fluorene, and Dibenzothiophene by the White Rot Fungus Pleurotus ostreatus", App & Env Microbiology, Vol. 62, No. 7, July 1996, pp 2554-2559.	
		SMIT et al, "Analysis of Fungal Diversity in the Wheat Rhizosphere by Sequencing of Cloned PCR-Amplified Genes Encoding 18S rRNA and Temperature Gradient Gel Electrophoresis", App & Env Microbiology, Vol. 65, No. 6, June, 1999 pp 2614-2621.	
JKW		STRAUB et al, "Anaerobic, Nitrate-Dependent Microbial Oxidation of Ferrous Iron", App & Env Microbiology, Vol. 62, No. 4, April 1996, pp 1458-1460.	

Examiner Signature	<i>Duluth Keenan</i>	Date Considered	8-4-07
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DLW		QUENTMEIER & FRIEDRICH, "Transfer and Expression of Degradative and Antibiotic Resistance Plasmids in Acidophilic Bacteria", App & Env Microbiology, Vol. 60, No. 3, March 1994, pp 973-978.	
		KASTNER et al, "Impact of Inoculation Protocols, Salinity, and pH on the Degradation of Polycyclic Aromatic Hydrocarbons (PAHs) and Survival of PAH-Degrading Bacteria Introduced into Soil", App & Env Microbiology, Vol. 64, No. 1, Jan. 1998, pp 359-362.	
		GROSSER et al, "Indigenous and Enhanced Mineralization of Pyrene, Benzo[a]pyrene, and Carbazole in Soils", App & Env Microbiology, Vol. 57, No. 12, Dec 1991, pp 3462-3469.	
		COATES et al, "Oxidation of Polycyclic Aromatic Hydrocarbons under Sulfate-Reducing Conditions", App & Env. Microbiology, Vol. 62, No. 3, March 1996, pp 1099-1101.	
		STAPLETON et al, "Biodegradation of Aromatic Hydrocarbons in an Extremely Acidic Environment", App & Env Microbiology, Vol. 64, No. 11, Nov 1998, pp 4180-4184.	
		KANALY & HARAYAMA, "Biodegradation of High-Molecular-Weight Polycyclic Aromatic Hydrocarbons by Bacteria", J of Bacteriology, Vol. 182, No. 8, April 2000, pp 2059-2067.	
		GOGOLEV & WILKE, "Combination effects of heavy metals and fluoranthene on soil bacteria", Biol Fertil Soils (1977) 25:274-278.	
		EATON & CHAPMAN, "Formation of Indigo and Related Compounds from Indolecarboxylic Acids by Aromatic Acid-Degrading Bacteria: Chromogenic Reactions for Cloning Genes Encoding Dioxygenases That Act on Aromatic Acids", J of Bacteriology, Vol. 177, No. 23, Dec 1995, pp 6983-6988.	
		ZINK & LORBER, "Mass Spectral Identification of Metabolites Formed by Microbial Degradation of Polycyclic Aromatic Hydrocarbons (PAH), Chemosphere, Vol. 31, No. 9, 1995, pp 4077-4084.	
DLW		MacGILLIVRAY & SHIARIS, "Biotransformation of Polycyclic Aromatic Hydrocarbons by Yeasts Isolated from Coastal Sediments", App & Env Microbiology, Vol. 59, No. 5, May 1993, pp 1613-1618.	

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	Art Unit	1754
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da		TRZESICKA-MLYNARZ & WARD, "Degradation of polycyclic aromatic hydrocarbons (PAHs) by a mixed culture and its component pure cultures, obtained from PAH-contaminated soil", Can J. Microbiology 41:470-476 (1995).	
S		ISHIDA & NAKUMURA, "Trichloroethylene Degradation by Ralstonia sp. KN1-10A Constitutively Expressing Phenol Hydroxylase: Transformation Products, NADH Limitation, and Product Toxicity", J. Bioscience & Bioengineering, Vol. 89, No. 5, 438-445, 2000.	
S		NAKAMURA, ISHIDA & IIZUMI, "Constitutive Trichloroethylene Degradation Led by tac Promoter Chromosomally Integrated Upstream of Phenol Hydroxylase Genes of Ralstonia sp. KN1 and Its Nucleotide Sequence Analysis", J. Bioscience & Bioengineering, Vol. 89, No. 1, 47-54, 2000.	
da		KASTNER, BREUER-JAMMALI & MAHRO, "Enumeration and characterization of the soil microflora from hydrocarbon-contaminated soil sites able to mineralize polycyclic aromatic hydrocarbons (PAH)", J. Microbiol Biotechnol (1994) 41:267-273.	

Examiner Signature	<i>[Signature]</i>	Date Considered	8-4-07
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First Named Inventor	Robin L. Brigmon
Art Unit	1754
Examiner Name	Unknown
Attorney Docket Number	WSR-54 (SRS 02-019)

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY			
06a		WO 00/56668 A	09/28/2000	Perriello		
06b		RU 2 228 953	05/20/2004	Marchenko et al		

Examiner Signature	<i>Dale K. Wain</i>	Date Considered	8-4-07
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Deu		Singleton, D et al: "Microbial diversity in an acidic refinery sludge: Abst. Gen. Mtg. Am. Soc. Microbiology, V. 101, 2001, p 637 & 101st Gen. Mtg. Orlando, FL 5/20-24/2001	
		Plaza Grazyna et al: "Relationship between soil microbial diversity and bioremediation process at an oil refinery", ACTA Microbiologica Polonica, V. 52, No. 2, 2003, pp 173-182	
		Database WPI, Derwent Pubs., Ltd., London, GB; AN 2004-446832 - Blokhin VA et al: "Strain of bacterium Pseudomonas alcaligenes MEV used for the removal of petroleum and its products from soil ground & surface water"	
		Korda, et al: "Petroleum hydrocarbon bioremediation: sampling and analytical techniques, in situ treatments and commercial microorganisms currently used", Appl. Microbiol Biotechnol (1997) 48: 677-686	
		Dagher, et al: "Comparative study of five polycyclic aromatic hydrocarbon degrading bacterial strains isolated from contaminated soils", Can. J. Microbiol 43: 368-377 (1997)	
		Saleh et al: "Bioremediation of Petroleum Hydrocarbon Pollution", Indian Journal of Biotechnology, Vol. 2, July 2003, pp 411-425	
		Andreoni et al, "Bacterial communities and enzyme activities of PAHs polluted soils", Chemosphere 57 (2004) 401-412	
		Hamana, et al: "Polyamine distribution profiles in newly validated genera and species within the Flavobacterium-Flexibacter-Cytophaga-Sphingobacterium complex", Microbios 106 SR, pp 105-116, 2001 The Faculty Press, Cambridge, Great Britain	
Deu		Communication Relating to the Results of the Partial International Search, PCT/US2005/003405, ISA/EPO, Rijswijk, NL, 12 Sep 2005, 3 pages.	

Examiner Signature	<i>John K. Way</i>	Date Considered	8-4-07
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